

ABSTRACT OF THE DISCLOSURE

An exposure apparatus with optimum illumination conditions without dependence on the directionality of the fine pattern on a reticle comprises an illumination optical system for illuminating a reticle having a pattern to be transferred and a projection optical system for projecting and transforming the reticle pattern on a substrate. The illumination optical system has pupil shape forming unit for forming four substantially planar light sources on the plane in the vicinity of its pupil. These four substantially planar light sources are arranged at each substantial vertices of a narrow rectangle whose barycenter is located on the illumination optical axis.